

## Abstract

The present invention relates to a device of self-determination position of a robot, and said device includes: a robot body; at least two driving wheels locating in two opposed sides of the robot body; a decelerator, connecting with a wheel shaft of said driving wheels through a power inputting portion; a motor, connecting with said power inputting portion of the decelerator through an outputting shaft; at least two driven wheels providing on the robot body, on which there are a plurality of grids around circumference direction taking the wheel shaft as the center; and at least two pairs of sensors, locating in one of outsides of each driven wheels, respectively, wherein said each pair of sensors include an emitting part and a receiving part facing toward said emitting part, moreover, through said grids, said receiving part can receive signals sent from the emitting part. According to the present invention, when said driving wheels lose steps or slip, the driven wheels do not move in respect to the ground, so that said sensors would not output signals about rotation of the wheels. It therefore can really represent the movement relation between said robot body and the ground.